Remarks/Arguments:

Claims 1-28, 31, 33-43 and 45-47 are pending in the application. The claims are not amended herewith, but are included for the Examiner's convenience.

Claim Rejections - 35 USC § 103

Claims 1-10, 12, 22-24, 27, 28, 31, 33-35, 41, 43, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2 355 956 ("Okhai") in view of US 4,971,847 ("Freed") and US 6,441,340 ("Varriano"). Applicants understand the Examiner's rationale for the rejection to be essentially as shown at points (i) through (vi) below.

(i) Okhai teaches the basic principle of laminating a gas-permeable layer to a perforated sealing layer to provide breathability, sealability and a physical barrier to microbes.

(ii) It is true that Okhai refers explicitly only to oriented polystyrene (OPS) and oriented polypropylene (OPP), but Okhai also states that:

"Any suitable gas-permeable barrier layer may be used.... a wide range of gas-permeable films having an equally wide range of physical properties is available, and any of these can be selected depending upon the desired application" (page 2, lines 26 to 30); and

"The gas-permeable barrier layer may be formed of any suitable natural or synthetic polymer, such as any suitable thermosetting or thermoplastic polymer. However, OPS or OPP films are especially preferred." (page 4, lines 4 to 7).

(iii) Freed teaches that *"it is known in the food packaging art that PP and PET, polycaprolactone and polyamide are known equivalents in the food packaging art as gas-permeable barrier layers (column 4, lines 40 to 47)"*.[1]

(iv) Freed teaches that *"along with polyolefins, polyesters and polyamides are also used in food packaging as barrier layers wherein oxygen, carbon dioxide and water vapour is to be allowed to pass"*.[2]

(v) The Examiner notes Applicants' declaration demonstrating that 25 μm films of polyester and polyamide have superior breathability compared with polyolefins (specifically, L-LDPE, HDPE and OPP) but he rejects the relevance of the data by arguing that:

[1] Final Office Action paragraph 11
[2] Final Office Action paragraph 52

(a) Okhai does not teach against using polyester or polyamide, and
(b) Freed teaches using polyester and polyamide for producing layers with higher transmission rates[3].

(vi) Freed teaches that polyester and polyamide are known equivalents of polypropylene as gas permeable barrier layers[4], and therefore it would have been obvious to substitute polyester or polyamide for OPP in making Okhai's barrier layer.

Applicants note that the statement at point (v)(b), assuming that this accurately represents the Examiner's position, reflects an apparent misunderstanding of Freed's teachings. Freed actually refers to polyester and polyamide as examples of what he refers to as "*the relatively more permeable polymer*"[5] used in his invention, but this begs the question "*more permeable than what?*". Freed's invention requires at least two layers of "*relatively good gas-barrier polymer*", and at least one layer of a "*relatively more permeable polymer*". The "*good gas-barrier polymer*" is a glutarimide (see claim 1). The "*more permeable polymer*" is selected from a very long list shown at column 4 lines 40 to 66, which includes:

> "*polycarbonates; ...polyesters; an aromatic resin such as poly(phenylene sulphide), poly(phenylene sulfone), poly(ester-ether-ketone) and the like; polyacetals; polyamides; poly(vinyl halides); poly(acrylates) and poly(methacrylates); poly(styrene); polyolefins such as poly(propylene) and poly(ethylene).*" [emphasis added]

Thus, Freed teaches only that a wide variety of polymers are equivalent for his purposes in that they are more permeable than glutarimide polymers, this relatively higher permeability being his only apparent criterion for suitability. While Freed indicates that a subset of this list is particularly preferred, that subset[6] again includes a number of chemically dissimilar polymers among which Freed does not differentiate. Specifically, Freed does not differentiate among poly(bis-phenol-A carbonate), PET, poly(vinyl chloride), polyethylene, polypropylene, nylon 6 and nylon 6,6, other than to say that poly(bis-phenol-A carbonate) is most preferred. Thus, Freed considers polyesters and polyamides equivalent to polyethylene and polypropylene for his purposes, and the skilled person reading Freed would have had no reason to pick one over the other.

---

[3] Final Office Action paragraph 52
[4] Final Office Action paragraph 11
[5] The Examiner cites Freed at column 4 lines 40 to 47 (actually lines 40 to 66)
[6] Freed column 4 line 66 to column 5 line 2

For that very same reason, the skilled person reading Freed would have found no motivation to depart from Okhai's teaching to use oriented polypropylene. The skilled person reading Freed might conclude, as the Examiner appears to have done, that polyesters and polyamides would have equivalent gas barrier properties to polypropylene. But Applicants have found what neither Okhai nor Freed has found, i.e., that polyesters and polyamides provide much higher permeability than Okhai's OPP. Thus, Applicants have found that any apparent equivalence of polyesters and polyamides to OPP for purposes of Freed's invention is in fact limited to that invention, and that polyesters and polyamides provide better results (higher permeability) than would have been expected by reading Okhai and Freed. Varriano addresses perforation issues but not the foregoing. Thus, the choice of polyesters or polyamides as recited in claim 1 would not have been obvious over Okhai in view of Freed and Varriano, and claim 1 should be allowed.

Additionally, Applicants note that the problem addressed by the present invention (starting from Okhai) is "*how to improve breathability of a barrier packaging film*". Freed is very definitely concerned with precisely the opposite result, i.e. the provision of packaging with outstanding resistance to gas permeation, including oxygen, CO_2 and water vapour (see abstract; column 1, lines 9 to 16; column 2, lines 4 to 17, etc.). There is simply no motivation for the skilled person, seeking to improve the permeability/breathability of Okhai's films, to even consult the disclosure of Freed. Even if he did, then at best Freed leaves the skilled person no closer to the present invention than he was when considering Okhai in isolation. At worst, the use of the (whole) teaching of Freed (i.e. including the highly impermeable glutarimide layers in the film) would destroy the permeability of Okhai's films. For this additional reason, the combination of Okhai with Freed cannot render the claimed invention obvious.

Claims 13-15, 20, 21, 36 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano and WO 01/92000 ("Lin").

Claims 11 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano and US 4,918,156 ("Rogers").

Claims 16, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano, Lin and US 6,787,630 ("Dominguez").

Claims 17, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano, Lin and US 4,450,250 ("McConnell").

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano, Lin and US 4,172,824 ("Harrington").

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okhai in view of Freed, Varriano and US 6,143,818 ("Wang").

All of the above rejections rely on Okhai in view of Freed and Varriano as described above, and Applicants submit that all of these rejections should be withdrawn for the reasons already discussed.

Conclusion

Applicants submit that the rejections have been overcome, and respectfully request entry of the amendments, reconsideration and early notice of allowance. Applicants invite the Examiner to contact their undersigned representative, Frank Tise, if it appears that this may expedite examination.

Respectfully submitted,

Frank P. Tise

Rex A. Donnelly, Reg. No. 41,712
Frank P. Tise, Reg. No. 50,379
Attorney and Agent for Applicants

RAD/FPT/jyr/pbm

Dated: September 14, 2011

RatnerPrestia
P.O. Box 1596
Wilmington, DE 19899
(302) 778-2500

The Director is hereby authorized to charge or credit Deposit Account No. **18-0350** for any additional fees, or any underpayment or credit for overpayment in connection herewith.

1360556